Claims:

1. A method for isolating a T cell population, comprising

   i. contacting a population of cells comprising a T cell with a first activator that binds to a T cell receptor on the T cell thereby activating the T cell and a first agent that binds to a first cell surface molecule on the T cell, to obtain a T cell population bound by the first agent; and

   ii. isolating the T cell population by a method using the first agent,

   to thereby isolate a T cell population.

2. The method of claim 1, wherein the T cell is a CD4+ T cell.

3. The method of claim 1, wherein the first cell surface molecule is an activation marker.

4. The method of claim 3, wherein the activation marker is CD40L or CTLA-4.

5. The method of claim 1, wherein the first agent is an antibody or portion thereof sufficient for binding specifically to the surface molecule.

6. The method of claim 1, wherein the first agent is labeled.

7. The method of claim 6, wherein the first agent is directly labeled.

8. The method of claim 6, wherein the first agent is indirectly labeled.

9. The method of claim 6, wherein the method using the first agent is fluorescence activated cell sorting (FACS).

10. The method of claim 6, wherein the method using the first agent comprises using a solid surface to which the T cell binds.

11. The method of claim 1, further comprising contacting the T cell population with a first detection agent that specifically binds to the first agent.

12. The method of claim 11, wherein the first detection agent is labeled.

13. The method of claim 1, wherein the first activator binds to the antigen-binding region of the T cell receptor.

14. The method of claim 13, wherein the first activator is an antigen.

15. The method of claim 1, wherein the first activator does not bind to the antigen-binding region of the T cell receptor.

16. The method of claim 15, wherein the first activator is a superantigen.

17. The method of claim 15, wherein the first activator is a polyclonal activator.

18. The method of claim 14, wherein the antigen is located on an antigen presenting cell.

19. The method of claim 1, wherein the T cell is a human T cell.

20. The method of claim 1, wherein the T cell is a non-human primate T cell.

21. The method of claim 19, wherein the T cell is obtained from a subject.

22. The method of claim 21, wherein the population of cells comprises peripheral blood mononuclear cells.

23. The method of claim 21, wherein the population of cells comprises bone marrow cells.

24. The method of claim 1, wherein the population of T cells is contacted essentially simultaneously with the first agent and the first activator.

25. The method of claim 1, wherein the population of T cells is contacted with the first agent prior to being contacted with the first activator, wherein the T cell is contacted simultaneously with the first activator and the first agent for at least about 10 minutes.

26. The method of claim 1, wherein the population of T cells is contacted with the first activator prior to being contacted with the first agent, wherein the T cell is contacted simultaneously with the first activator and the first agent for at least about 10 minutes.

27. The method of claim 1, further comprising contacting the population of T cells with the first agent after contacting the T cell with the first activator.

28. The method of claim 1, further comprising

i. contacting the T cell population with (a) a second activator that binds to the T cell receptor on at least some cells of the T cell population thereby activating at least some cells of the T cell population and (b) a second agent

that binds to a second cell surface molecule of at least some cells of the T cell population, to obtain a T cell population bound by the second agent; and

ii. isolating the T cell population by a method using the second agent,

to thereby isolate a T cell population.

29. The method of claim 28, wherein the second activator is the same as the first activator.

30. The method of claim 28, wherein the second activator is different from the first activator.

31. The method of claim 28, the second agent is the same as the first agent.

32. The method of claim 28, wherein the second agent is different from the first agent.

33. The method of claim 32, wherein the second cell surface molecule is the same as the first cell surface molecule.

34. The method of claim 32, wherein the second cell surface molecule is different from the first cell surface molecule.

35. The method of claim 34, wherein the first cell surface molecule is CD40L and the second cell surface molecule is CTLA-4.

36. An isolated viable cell population, wherein at least about 90% of the cell population consists of viable T cells.

37. The isolated viable cell population of claim 36, wherein at least about 90% of the cell population consists of viable CD4+ T cells.

38. The isolated viable cell population of claim 36, wherein at least about 90% of the cell population consists of viable CD40L+ CD4+ T cells.

39. The isolated viable cell population of claim 36, wherein at least about 90% of the cell population consists of viable CTLA-4+ CD4+ T cells.

40. An isolated viable T cell population isolated by the method of claim 1.

41. The isolated viable T cell population of claim 36, which comprises human cells.

42. The isolated viable T cell population of claim 36, which comprises rhesus monkey cells.

43. A method for treating a subject having cancer or an infectious disease, comprising

(i) obtaining a population of cells comprising a T cell from the subject;

(ii) subjecting the population of cells to the method of claim 1 to thereby obtain a T cell population; and

(iii) administering the T cell population to the subject,

to thereby treat the subject having cancer or an infectious disease.